

# OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

*Edited by*

**FRANCIS HEMMING, C.M.G., C.B.E.**  
Secretary to the Commission

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## **OPINION 512**

Validation under the Plenary Powers of the generic name  
*Sao Barrande*, 1846 (Class Trilobita)



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# INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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(16th December 1954)

## OPINION 512

### VALIDATION UNDER THE PLENARY POWERS OF THE GENERIC NAME "SAO" BARRANDE, 1846 (CLASS TRILOBITA)

**RULING :—**(1) The following action is hereby taken under the Plenary Powers :—

- (a) The generic name *Sao* Billberg, 1820 (Class Crustacea, Order Stomatopoda), is hereby suppressed for the purposes both of the Law of Priority and of the Law of Homonymy.
- (b) The emendation to *Ellipsocephalus* of the generic name *Elleipsocephalus* Zenker, 1833 (Class Trilobita) is hereby approved.

(2) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below :—

- (a) *Sao* Barrande, 1846, as validated under the Plenary Powers in (1)(a) above, a name having precedence over *Monadina* Barrande, 1846, by the "First Reviser" selection made by Poulsen (C.) (1956) (gender : feminine) (type species, by monotypy : *Sao hirsuta* Barrande, 1846 (Class Trilobita) (Name No. 1261) ;
- (b) *Ellipsocephalus* (emend. under the Plenary Powers in (1)(b) above of *Elleipsocephalus*) Zenker, 1833,

(gender : masculine) (type species, by monotypy : *Elleipsocephalus* [*sic*] *ambiguus* Zenker, 1833) (Class Trilobita) (Name No. 1262) ;

- (c) *Pyrunculus* Pilsbry, 1895 (gender : masculine) (type species, by original designation : *Bulla* (*Atya*) *pyriformis* Adams (A.), 1850) (Class Gastropoda) (Name No. 1263).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

- (a) *hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta* (specific name of type species of *Sao* Barrande, 1846) (Name No. 1504) ;
- (b) *hoffii* Schlotheim, 1823, as published in the combination *Trilobites hoffii* (Name No. 1505) ;
- (c) *pyriformis* Adams (A.), 1850, as published in the combination *Bulla* (*Atya*) *pyriformis* (specific name of type species of *Pyrunculus* Pilsbry, 1895) (Name No. 1506).

(4) The under-mentioned generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Numbers severally specified below :—

- (a) *Sao* Billberg, 1820, as suppressed under the Plenary Powers in (1)(a) above (Name No. 1151) ;
- (b) *Sao* Adams (H.), 1854 (a junior homonym of *Sao* Barrande, 1846) (Name No. 1152) ;
- (c) *Elleipsocephalus* Zenker, 1833 (ruled under the Plenary Powers in (1)(b) above to be an Invalid

Original Spelling for *Ellipsocephalus*) (Name No. 1153) ;

- (d) *Staurogmus* Hawle (I.) & Corda (A.J.C.)<sup>1</sup>, 1847 (a junior objective synonym of *Sao* Barrande, 1846) Name No. 1154).

(5) The under-mentioned specific name is hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name No. 516 :—

*muricatus* Hawle (I.) & Corda (A.J.C.)<sup>1</sup>, 1847, as published in the combination *Staurogmus muricatus* (a junior objective synonym of *hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta*).

(6) The under-mentioned family-group names are hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Numbers severally specified below :—

- (a) SAOIDAE Hupé, 1953 (type genus : *Sao* Barrande, 1846) (Name No. 220) ;
- (b) ELLIPSOCEPHALIDAE Matthew (G.F.), 1887 (type genus *Ellipsocephalus* (emend. of *Elleipsocephalus*) Zenker, 1833) (Name No. 221).

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<sup>1</sup> For some years there has been disagreement among Trilobite specialists as to whether the "Prodrom" of 1847, in which this name was published, should be attributed to Hawle & Corda jointly (as stated on the title) or to Corda alone (as was later alleged by Hawle to have been the case). The applicant in the present case took the view that Corda should be regarded as sole author. At the time when this *Opinion* was prepared the disputed authorship in this case was under consideration by the Commission which has since rendered a *Direction* (*Direction* 95) in which it has ruled that Hawle & Corda are to be treated as having been joint authors. In the same *Direction* the Commission gave instructions that names published in the "Prodrom" should be so attributed in all cases where names published in it had so far been placed on *Official Lists* or *Official Indexes*. The required corrections have accordingly been made in the Ruling given in the present *Opinion*.

(7) The under-mentioned family-group names are hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* with the Name Numbers severally specified below :—

- (a) SAOIDAE (correction of SAONIDES) Billberg, 1820 (type genus : *Sao* Billberg, 1820) (automatically suppressed under the Plenary Powers through *Declaration* 20 consequent upon the suppression under those Powers in (1)(a) above of the generic name *Sao* Billberg, 1820) (Name No. 260) ;
- (b) SAONIDES Billberg, 1820 (type genus *Sao* Billberg, 1820) (an Invalid Original Spelling for SAOIDAE) (Name No. 261).

## I. THE STATEMENT OF THE CASE

On 24th March 1952 Professor Christian Poulsen (*Universitetets Mineralogisk-Geologiske Institut, Mineralogisk Museum, Copenhagen, Denmark*) addressed a communication to the Office of the Commission in which he drew attention to a paper entitled "Nomina Conservanda : Antrag auf Aufhebung der "Regeln" zu Gunsten von *Sao* Barrande 1846", in which Professor Rudolf Richter had in 1941 (*Senckenbergiana* 23 : 291—293) advocated the grant by the International Commission under its Plenary Powers of protection to the generic name *Sao* Barrande, 1846, the name of a well-known genus in the Class Trilobita, which was technically invalid as being a junior homonym of the long-forgotten and never-used name *Sao* Billberg, 1820, in the Class Crustacea. In the foregoing communication Professor Poulsen expressed the hope that it would be possible for the Commission to take action in the sense that had been recommended by Professor Richter in the paper referred to above. As the result of further correspondence, Professor Poulsen undertook himself to submit an application to the Commission on this subject, but intimated that he would be grateful if, in view of his pre-occupation with other duties, Dr. C. J. Stubblefield (*Geological*



*Survey and Museum, London*), in conjunction with the Secretary, would assist by investigating the detailed issues involved. Work on this basis was begun towards the close of 1955. Later, the assistance of Dr. L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) was sought by the Secretary on the questions relating to the names of Crustacea involved in this case by reason of the fact that the name *Sao* Billberg, which it was the object of the application should be suppressed by the Commission under its Plenary Powers in favour of the Trilobite name *Sao* Barrande, was the name of a nominal genus belonging to the Order Stomatopoda. These investigations were completed in the spring of 1956 and on 13th April of that year the following application was submitted to the Commission by Professor Poulsen :—

**Proposed validation under the Plenary Powers of the generic name “ *Sao* ” Barrande, 1846 (Class Trilobita)**

By CHRISTIAN POULSEN

(*Universitetets Mineralogisk-Geologiske Institut,  
Mineralogisk Museum, Copenhagen, Denmark*)

The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers for the purpose of validating the long-familiar generic name *Sao* Barrande, 1846 (Class Trilobita). That this generic name is technically invalid has long been known, but owing to the special importance of this genus no attempt has ever been made to replace it by some other name. Nor is the project that the Commission should be asked to validate the name *Sao* Barrande a new one, for already during the recent war Rudolf Richter in a paper entitled “ *Nomina conservanda : Antrag auf Aufhebung der ‘Regeln’ zu Gunsten von Sao Barrande 1846* ” (1941, *Senckenbergiana* **23** : 291—293) recommended the adoption of this course.

2. The age of the genus *Sao* Barrande is Middle Cambrian and the genus is of exceptional importance since it represents the most classical case of the developmental history of a trilobite species. The work on trilobites published in 1852 (*Syst. Silur. Bohême*) in which Barrande published his conclusions in regard to this genus was a pioneer study of its kind and was based upon material which was exceptional both for its state of preservation and for its completeness from the early protaspis stage to the adult. The figures given by Barrande are widely reproduced in general text-books both of zoology and palaeontology. It would be little short of a disaster if this historic name were

to be cast aside for the sake of some narrow nomenclatorial technicality. The history of this case is set out in the following paragraphs.

3. The nominal genus *Sao* was established by Barrande in 1846 (*Not. prél. Silur.* : 13) with the species *Sao hirsuta* Barrande, 1846 (*ibid.* : 13) as type species by monotypy. At this early date Barrande did not fully appreciate the character of this species and in the same paper he described other specimens of it under the new generic and specific names *Monadina distincta* (: 19), while to another specimen he gave a third new specific name *nanus* (: 12), placing the species so named in the genus *Ellipsocephalus* (emend. of *Elleipsocephalus*) Zenker, 1833 (*Beitr. Nat. Umwelt* : 51).

4. The status of *Sao* Barrande is not adversely affected by the existence of the older name *Elleipsocephalus* Zenker, 1833, for the type species of that genus does not even belong to the same family as the genus *Sao*. The type species by monotypy of this genus is *Elleipsocephalus ambiguus* Zenker (: 51), which ever since Emmrich (1839, *De Trilobitis* : 44) has been subjectively identified with *Trilobites hoffii* Schlotheim, 1823 (*Petrefactenk. Nachtr.* 2 : 30). Emmrich (: 17) was the first author also to emend to *Ellipsocephalus* the defective original spelling *Elleipsocephalus* and this emendation completely replaced the original spelling. As part of the general settlement now proposed this generic name in its emended spelling should be placed on the *Official List of Generic Names in Zoology*. This genus is the type genus of the well-established family ELLIPSOCEPHALIDAE Matthew (G.F.), 1887 (*Trans. R. Soc. Canada* 5 (sect. 4) : 128). This name should now be placed on the *Official List of Family-Group Names in Zoology*.

5. The generic name *Monadina* applied by Barrande to a specimen of *S. hirsuta* Barrande at the same time that the nominal genus *Sao* was established (paragraph 3 above) is a subjective synonym of the latter name. Accordingly, as the names *Sao* and *Monadina* were published in the same book and on the same date, the relative precedence to be accorded to them is, under the *Règles* (1953, *Copenhagen Decisions zool. Nomencl.* : 66—67, Decisions 123—124) through the application of the “First Reviser” Rule. The name *Monadina* was treated by Barrande in 1852 as a junior synonym of *Sao* and it has been similarly treated by subsequent authors. It is not clear, however, that Barrande’s action constituted a formal choice in favour of *Sao* as against *Monadina* under the foregoing Rule. Accordingly, in order to set at rest any possible doubts on this subject, I here select the name *Sao* under the “First Reviser” Rule to take precedence over the name *Monadina*.

6. The next author to deal with the species to which Barrande in 1846 had given the name *Sao hirsuta* was Corda in Hawle & Corda in 1847<sup>2</sup> in his paper entitled *Prodrom einer Monographie der böhmischen*

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<sup>2</sup> See Footnote 1.



*Trilobiten* (: 1—116). In this paper Corda completely misunderstood the material before him and erected no less than ten new nominal genera and eighteen new nominal species on the basis of specimens of Barrande's *hirsuta*. With two exceptions these names are subjective synonyms only and as such do not fall within the scope of the present application. The two exceptions are :—(1) *Staurognmus* Corda, 1847 (*ibid.* : 28), a substitute name for *Sao* Barrande, 1846 ; (2) *muricatus* Corda, 1847 (*ibid.* : 28), as published in the combination *Staurognmus muricatus*, a substitute name for *hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta*.

7. Up till 1955 the genus *Sao* Barrande was placed in various families, including the family SOLENOPLEURIDAE and the family PTYCHOPARIIDAE. In the most recent treatment of this group Hupé in his Classification des Trilobites (*Ann. Paléont.* 41 : 130) has however erected the family-group taxon SAOIDAE for this taxon.<sup>3</sup>

8. The technical defect which at present renders the name *Sao* Barrande, 1846, invalid is that that name is a junior homonym of *Sao* Billberg, 1820 (*Enum. Ins. Mus. Billberg.* : 135). Reference to the copy of this rare work in the library of the British Museum (Natural History) shows that *Sao* Billberg is the name of a monotypical genus having as its type species by monotypy the nominal species *Cancer mantis* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1 : 633) (Class Crustacea, Order Stomatopoda). By the Ruling given by the Commission under its Plenary Powers in *Opinion* 186 (1945, *Ops. Decs. int. Comm. zool. Nomencl.* 3 : 53—64) the above species was designated as the type species of the genus *Squilla* Fabricius, 1787, of which therefore the name *Sao* Billberg, 1820, is a junior objective synonym. It will thus be seen that from the point of view of carcinologists there cannot be the slightest objection to the suppression of the name *Sao* Billberg by the Commission under its Plenary Powers, while, as already explained, such action would be of the greatest possible value to workers on Trilobites. The generic name *Squilla* Fabricius, 1787, was placed on the *Official List of Generic Names in Zoology* by the Ruling given in *Opinion* 186, while the name *mantis* Linnaeus, 1758, as published in the combination *Cancer mantis* was placed on the *Official List of Specific Names in Zoology* by the Ruling given in *Direction* 1 (1954, *Ops. Decs. int. Comm. zool. Nomencl.* 3(30) : 401—416). No action therefore requires to be taken in regard to either of these names.

9. It must be noted also that Billberg placed his genus *Sao* in a suprageneric taxon of family-group rank (the category concerned being styled by Billberg as a “ Natio ”), to which he gave the name SAONIDES.

<sup>3</sup> At a later stage Dr. C. J. Stubblefield reported that he had ascertained that Hupé had erected a nominal family-group taxon based on the name *Sao* Barrande two years earlier than had been previously believed, i.e., in 1953 (in Piveteau (J.), *Traité de Paléont.* 3 : 193).

Until recently the existence of a family-group name based upon the generic name *Sao* Billberg in Crustacea would have given rise to a troublesome problem of homonymy in relation to the family-group name in Trilobita based upon the generic name *Sao* Barrande. Fortunately, however, no difficulty need be anticipated under this head, for under a *Declaration* (*Declaration* 20) recently adopted by the Commission (1955, *Ops. Decls. int. Comm. zool. Nomencl.* **10**(19 : i—viii) it has been ruled that, where the name of a genus which is the type genus of a taxon of the family-group is suppressed by the Commission under its Plenary Powers, the decision so taken is to apply equally to the family-group name based on the generic name in question. Accordingly, if the Commission grants the present application for the suppression of the generic name *Sao* Billberg, that decision will automatically carry with it a decision similarly to suppress the family-group name SAOIDAE (correction of SAONIDES) Billberg, 1820.

10. In addition to the senior homonym *Sao* Billberg, 1820, discussed in the immediately preceding paragraph, there is also a junior homonym *Sao* Adams (H.), 1854 (*Gen. rec. Moll.* **2** : 21), a name applied to a genus of Mollusca (Class Gastropoda). This name was replaced by the name *Pyrunculus* by Pilsbry in 1895 (*in* Tryon & Pilsbry, *Man. Conch.* (1) **15** : 181, 229). The type species of this genus by original designation is *Bulla* (*Atya*) *pyriformis* Adams (A.), 1850 (*Thes. Conch.* **2** : 589). As part of the general settlement of the *Sao* problem now proposed, the name *Sao* Adams should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* and the other names mentioned above should be placed on the appropriate *Official Lists*. Neither *Sao* Adams nor *Pyrunculus* Pilsbry have been taken as the base for a family-group name, the genus being currently placed in the family RETUSIDAE.

11. For the reasons set forth in the present application the International Commission on Zoological Nomenclature is asked :—

(1) to use its Plenary Powers :—

- (a) to suppress the generic name *Sao* Billberg, 1820 (Class Crustacea, Order Stomatopoda) for the purposes both of the Law of Priority and of the Law of Homonymy ;
- (b) to approve the emendation *Ellipsocephalus* (published by Emmrich (H.F.) in 1839 and since generally adopted) of the generic name *Elleipsocephalus* Zenker, 1833 (Class Trilobita) ;

(2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—

- (a) *Sao* Barrande, 1846, as validated under the Plenary Powers under (1)(a) above (gender : feminine) (type species, by monotypy : *Sao hirsuta* Barrande, 1846) (Class Trilobita) ;

(b) *Ellipsocephalus* (emend. under the Plenary Powers under (1)(b) above of *Elleipsocephalus*) Zenker, 1833 (gender : masculine) (type species, by monotypy : *Ellipsocephalus* (emend. of *Elleipsocephalus*) *ambiguus* Zenker, 1833) [Note not for the inclusion in the "Official List" : The name *ambiguus* Zenker, 1833, as published in the above combination is currently regarded as a junior subjective synonym of *hoffii* Schlotheim, 1823, as published in the combination *Trilobites hoffii*.] (Class Trilobita) ;

(c) *Pyrunculus* Pilsbry, 1895 (gender : masculine) (type species, by original designation : *Bulla* (*Atya*) *pyriformis* Adams (A.), 1850 [Note : The name *Pyrunculus* Pilsbry is a *nom. nov. pro* the invalid name *Sao* Adams, 1854, referred to in (4)(2) below.] (Class Gastropoda) ;

(3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—

(a) *hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta* (specific name of type species of *Sao* Barrande, 1846) ;

(b) *hoffii* Schlotheim, 1823, as published in the combination *Trilobites hoffii* ;

(c) *pyriformis* Adams (A.), 1850, as published in the combination *Bulla* (*Atya*) *pyriformis* (specific name of type species of *Pyrunculus* Pilsbry, 1895) ;

(4) to place the under-mentioned generic names on the *Official Index of Rejected and Invalid Generic Names in Zoology* :—

(a) *Sao* Billberg, 1820, as suppressed under the Plenary Powers under (1)(a) above ;

(b) *Sao* Adams (H.), 1854 (a junior homonym of *Sao* Barrande, 1846) ;

(c) *Elleipsocephalus* Zenker, 1833 (an Invalid Original Spelling for *Ellipsocephalus* rejected under the Plenary Powers under (1)(b) above) ;

(d) *Staurogmus* Corda in Hawle & Corda, 1847<sup>4</sup> (a junior objective synonym of *Sao* Barrande, 1846) ;

(5) to place the under-mentioned specific name on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—*muricatus* Corda in Hawle & Corda, 1847<sup>4</sup>, as published in the combination *Staurogmus muricatus* (a junior objective synonym of

<sup>4</sup> See Footnote 1.

*hirsuta* Barrande, 1846, as published in the combination *Sao hirsuta*) ;

(6) to place the under-mentioned family-group names on the *Official List of Family-Group Names in Zoology* :—

(a) SAOIDAE Hupé, 1955<sup>5</sup> (type genus : *Sao* Barrande, 1846) ;

(b) ELLIPSOCEPHALIDAE Matthew (G.F.), 1887 (type genus : *Ellipsocephalus* (emend. of *Elleipsocephalus*) Zenker, 1833) ;

(7) to place the under-mentioned family-group names on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* :—

(a) SAOIDAE (correction of SAONIDES) Billberg, 1820 (type genus : *Sao* Billberg, 1820) (automatically suppressed under the Plenary Powers through *Declaration* 20 consequent upon the suppression under the above Powers of the generic name *Sao* Billberg, 1820, under (1)(a) above) ;

(b) SAONIDES Billberg, 1820 (type genus : *Sao* Billberg, 1820) (an Invalid Original Spelling for SAOIDAE).

## II. THE SUBSEQUENT HISTORY OF THE CASE

**2. Registration of the present application :** Upon the receipt in 1952 of Professor Poulsen's preliminary communication the question of the validation of the generic name *Sao* Barrande, 1846 (Class Trilobita), was allotted the Registered Number Z.N.(S.) 666.

**3. Publication of the present application :** The present application was sent to the printer on 20th April 1956 and was published on 20th July 1956 in Part 5 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Poulsen, 1956, *Bull. zool. Nomencl.* **12** : 131—135).

<sup>5</sup> For a correction of the date (and reference attributable to this name see footnote 3.

**4. Issue of Public Notices :** Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 20th July 1956 (a) in Part 5 of Volume 12 of the *Bulletin of Zoological Nomenclature* (the Part in which Professor Poulsen's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given to four general zoological serial publications and to three palaeontological serials in Europe and America.

**5. Support Received :** The present application was (as explained in the first paragraph of the present *Opinion*) originally suggested by Professor Rudolf Richter (*Senckenbergische Naturforschender Gesellschaft, Senckenberg, Frankfurt a.M., Germany*). It was supported also by the two specialists who co-operated with Professor Poulsen in its preparation, namely Dr. C. J. Stubblefield (*Geological Survey and Museum, London*) from the Trilobite side and Dr. L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) from the Crustacea side. After the publication of Professor Poulsen's paper, the former of the above specialists submitted a separate note of support. In the same period a letter of support was received also from Dr. H. B. Whittington (*Museum of Comparative Zoology at Harvard College, Massachusetts, U.S.A.*). The communications so received from Dr. Stubblefield and Dr. Whittington are reproduced in the immediately following paragraphs.

**6. Support received from C. J. Stubblefield (Geological Survey and Museum, London) :** On 17th August 1956 Dr. C. J. Stubblefield (*Geological Survey and Museum, London*) addressed the following note of support to the Office of the Commission (Stubblefield, 1956, *Bull. zool. Nomencl.* **12** : 256) :—

In the interests of nomenclatorial stability I support the proposal that the well-known generic names *Sao* Barrande, 1846, and *Ellipsocephalus* Zenker, 1833, be validated in accordance with current usage.



**7. Support received from H. B. Whittington (Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.) :** On 28th September 1956 Dr. H. B. Whittington (*Museum of Comparative Zoology at Harvard College, Cambridge, Mass., U.S.A.*) addressed the following note to the Office of the Commission in support of the present case (Whittington, 1956, *Bull. zool. Nomencl.* **11** : 361) :—

I heartily support the application made by Professor C. Poulsen regarding the name *Sao Barrande*, 1846 (Class Trilobita) and related matters.

**8. No Objection Received :** No objection to the action proposed in the present case was received from any source.

### III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

**9. Issue of Voting Paper V.P.(57)15 :** On 15th February 1957 a Voting Paper (V.P.(57)15) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Sao Barrande*, 1846 (Class Trilobita), as set out in Points (1) to (7) in paragraph 11 on pages 134 to 135 of Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].

**10. The Prescribed Voting Period :** As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th May 1957.

**11. Particulars of the Voting on Voting Paper V.P.(57)15 :** At the close of the Prescribed Voting Period, the

state of the voting on Voting Paper V.P.(57)15 was as follows :—

- (a) *Affirmative Votes had been given by the following twenty-four (24) Commissioners (arranged in the order in which Votes were received) :*

Boschma ; Mayr ; Lemche ; Hering ; Prantl ; Holthuis ;  
Bonnet ; Mertens ; Dymond ; Vokes ; Bodenheimer ;  
Bradley (J.C.) ; Key ; Riley ; Stoll ; Esaki ; do Amaral ;  
Hemming ; Kühnelt ; Cabrera ; Jaczewski ; Tortonese ;  
Sylvester-Bradley ; Miller ;

- (b) *Negative Votes :*

None ;

- (c) *Prevented from voting by the interruption of postal communications consequent upon political disturbances, one (1) :*

Hankó ;

- (d) *Voting Papers not returned :*

None.

**12. Declaration of Result of Vote ;** On 16th May 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)15, signed a Certificate that the Votes cast were as set out in paragraph 11 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

**13. Preparation of the Ruling given in the present " Opinion " :**

On 4th January 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)15.

**14. Original References for Generic and Specific Names :** The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

*Elleipsocephalus* Zenker, 1833 (an Invalid Original spelling for *Ellipsocephalus*)

*Ellipsocephalus* (emend. of *Elleipsocephalus*) Zenker, 1833, *Beitr. Nat. Umwelt* : 51

*hirsuta*, *Sao*, Barrande, 1846, *Not. prélim. Syst. silur. Trilob. Bohême* : 13

*hoffii*, *Trilobites*, Schlotheim, 1823, *Die Petrefactenk*, Nachtr. **2** : 30  
*muricatus*, *Staurogmus*, Hawle (I.) & Corda (A.J.C.),<sup>6</sup> 1847, *Prodrom Mon. böhm. Trilob.* : 28 (also published in 1848 in *Abh. Königl.-böhm. Ges. Wiss.* (5) **5** : 144)

*pyriformis*, *Bulla* (*Atya*), Adams (A.), 1850, *Thes. Conch.* **2** : 589  
*Pyrunculus* Pilsbry, 1895, in Tryon & Pilsbry, *Man. Conch.* (1) **15** : 181, 229

*Sao* Billberg, 1820, *Enum. Ins. Mus. Billberg* : 135

*Sao* Barrande, 1846, *Not. prélim. Syst. silur. Trilob. Bohême* : 13

*Sao* Adams (H.), 1854, *Gen. rec. Moll.* **2** : 21

*Staurogmus* Hawle (I.) & Corda (A.J.C.),<sup>6</sup> 1847, *Prodrom Mon. böhm. Trilob.* : 28 [For a note on the reference here cited see *muricatus*, *Staurogmus*, above.]

**15. Reference for a " First Reviser " selection giving precedence to one of two subjective synonyms published in the same work and**

<sup>6</sup> See footnote 1

**on the same date :** The following is the reference for a " First Reviser " selection giving precedence to one of two subjective synonyms published in the same work and on the same date specified in the Ruling given in the present *Opinion* :—

For <i>Sao</i> Barrande, 1846, " First	Poulsen (C.), 1956, <i>Bull.</i>
Reviser " selection in favour of,	<i>zool. Nomencl.</i> 12 :
over <i>Monadina</i> Barrande, 1846	132

**16. Original References for Family-Group Names :** The following are the original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* and the *Official Index* respectively for the names of taxa of the family-group category :—

ELLIPSOCEPHALIDAE Matthew (G.F.), 1887, *Trans. R. Soc. Canada* 5 (Sect. 4) : 128

SAOIDAE (correction of SAONIDES) Billberg, 1820, *Enum. Ins. Mus. Billberg.* : 135

SAOIDAE Hupé, 1953, in Piveteau (J.), *Traité Paléont.* 3 : 193<sup>7</sup>

SAONIDES Billberg, 1820 (an Invalid Original Spelling for SAOIDAE).

**17. Nominal genera involved in the present case on which no nominal family-group taxa have been established :** Neither the nominal genus *Sao* Adams (H.), 1854, nor its nominal replacement genus *Pyrunculus* Pilsbry, 1895, referred to in the present *Opinion* has been taken as the type genus of a nominal family-group taxon. The genus in question is currently placed in the family RETUSIDAE.

**18. Compliance with Prescribed Procedures :** The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed

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<sup>7</sup> For the substitution of the reference for that cited in the application submitted in this case see Footnote 3.

Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

**19. "Opinion" Number :** The present *Opinion* shall be known as *Opinion* Five Hundred and Twelve (512) of the International Commission on Zoological Nomenclature.

DONE in London, this Fourth day of January, Nineteen Hundred and Fifty-Eight.

*Secretary to the International Commission  
on Zoological Nomenclature*

**FRANCIS HEMMING**